

ABSTRACT

The Biomimetic Sonar invention ensonifies submerged objects, digitizes acoustic images reflected from the ensonified objects, and classifies and stores the digitized images using electronic processing derived from that believed to be used by *Tursiops truncatus*, the bottlenose dolphin. The invention also provides a probable identification of an ensonified object based on comparison of an ensonified object with templates in a library of acoustic images.